41

27

81. The biosensor according to claim 45, wherein a chemical group is present between the surface and the binding group.

42

41

%2. The biosensor according to claim %1, wherein the chemical group is a -CO-CH<sub>2</sub>CH<sub>2</sub>-S- group.

43

und.

27

83. The biosensor according to claim 45, wherein the protein comprises bovine serum albumin.

58

44

84. The biosensor according to claim 56, wherein the protein comprises bovine serum albumin.--

## **REMARKS**

Applicants respectfully requests reconsideration of this application, as amended, and reconsideration of the Office Action dated April 25, 2000.

Claims 22-84 are pending in this application, as amended.

Applicants gratefully acknowledge the Examiner's indication that claims 44 and 45 contain allowable subject matter. Claim 44 has been canceled from the application, and the subject matter of that claim incorporated into independent claim 22, from which all of the claims of the application depend. Applicants respectfully submit, therefore, that all of the claims of the

24

ZX

application are now in condition for allowance. Allowance at the Examiner's earliest convenience is respectfully requested.

Claim 45, also containing allowable subject matter, has been amended to specifically recite the sequence in which the protein is linked between the spacer molecule and the binding group. The alternative sequence of claim 45, in which the protein is linked between the binding group and the biosensor surface, is now described in new claim 50.

New claims 50-84 are presented herein, and find proper support in the written description and in the original claims of the application. Specifically, new claim 50 finds support in claim 45, which was earlier indicated as containing allowable subject matter. New claims 51-70 and 71-72 correspond to the dependent claims of the claim set from the previously filed Amendment, but depend from amended claim 45 and new claim 50 rather than from independent claim 22.

New claims 73-84 similarly find proper support in the written description. Specifically, new claims 73-78 find support, for example, at page 4, line 35, to page 5, line 9. New claims 79-82 find support, for example, at page 6, lines 1-10, and new claims 83-84 find support at page 6, lines 12-14. Applicants respectfully submit that the newly presented claims contain now new matter.

Claims 23 and 28-30 were rejected in the Office Action under 35 U.S.C. § 112, first paragraph, as containing subject matter not fully described in the specification. Applicants respectfully traverse this rejection and request its withdrawal. However, in the interests of



facilitating allowance of the present application, the rejected claims have been amended to more closely track the language in the cited portion of the specification. Applicants wish to note that the description in claim 23 of a fragment of a carbohydrate derivative which binds in a biospecific manner simply describes a binding *characteristic* of the fragment. It is not intended that the binding described actually take place until the biosensor is used in the application for which it is intended. Applicants respectfully submit that rejected claims 23, 28 and 30, as amended, fully comply with 35 U.S.C. § 112, and respectfully request that the rejection be withdrawn.

Claims 22-43 and 46-49 were rejected in the Office Action under 35 U.S.C. § 103(a) as being unpatentable over Nilsson, U.S. Pat. No. 4,918,009, in view of Attridge, WO 90/01166, and Karube, EP 0215669, for the reasons already of record. Applicants respectfully traverse this rejection and request its withdrawal. However, Applicants note that in the interests of facilitating the allowance of the present application, independent claim 22 has been amended to incorporate the subject matter of claim 44, which was indicated as allowable. Applicants therefore respectfully submit that the rejection of the claims of the application is overcome, and respectfully request that the rejection be withdrawn.

Applicants respectfully submit that the all of the objections and rejections presently pending in the application are overcome. Applicants therefore respectfully request that the rejections be withdrawn, and that the claims be allowed at the Examiner's earliest convenience. If

any further issues need be addressed to place the application in condition for allowance,

Applicants respectfully urge the Examiner to contact the undersigned counsel so that the
application may be promptly allowed.

If any additional fees are due in connection with the filing of this Amendment, such as additional fees under 37 C.F.R. §§ 1.16 or 1.17, please charge the fees to our Deposit Account No. 02-4300. If an additional extension of time under 37 C.F.R. § 1.136 is necessary and not accounted for in the papers filed herewith, such an extension is requested. The extension fee should also be charged to Deposit Account No. 02-4300. Similarly, any credit due should be credited to Deposit Account No. 02-4300.

Respectfully submitted,

SMITH, GAMBRELL & RUSSELL, LLP

BEVERIDGE, DEGRANDI, WEILACHER & YOUNG INTELLECTUAL PROPERTY GROUP

By:

Robert . Weilacher, Reg. No. 20,531

1850 M Street, N.W. (Suite 800)

Washington, D.C. 20036 Telephone: (202) 659-2811

Fax: (202) 659-1462

July 25, 2000